

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 7:

A47L

(11) International Publication Number: WO 00/28874

(43) International Publication Date: 25 May 2000 (25.05.00)

(21) International Application Number:

PCT/US99/27201

(22) International Filing Date:

16 November 1999 (16.11.99)

(30) Priority Data:

60/108,629

16 November 1998 (16.11.98) US

(71) Applicant (for all designated States except US): THE PROCTER & GAMBLE COMPANY [US/US]; One Procter & Gamble Plaza, Cincinnati, OH 45202 (US).

(72) Inventors; and

- (75) Inventors/Applicants (for US only): MCKENZIE, Kristen, Lynne [US/US]; 5365 Harvestdale Drive, Mason, OH 45040 (US). SCHEPER, William, Michael [US/US]; 2393 Picnic Woods Drive, Lawrenceburg, IN 47025 (US). THOEN, Christiaan, Arthur, Jacques, Kamiel [BE/US]; 8485 Rupp Farm Drive, West Chester, OH 45069 (US). KASTURI, Chandrika [US/US]; 10444 Cliffwood Court, Cincinnati, OH 45241 (US).
- (74) Agents: REED, T., David et al.; The Procter & Gamble Company, 5299 Spring Grove Avenue, Cincinnati, OH 45217-1087 (US).

(81) Designated States: AE, AL, AM, AT, AT (Utility model), AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, CZ (Utility model), DE, DE (Utility model), DK, DK (Utility model), DM, EE, EE (Utility model), ES, FI, FI (Utility model), GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK (Utility model), SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

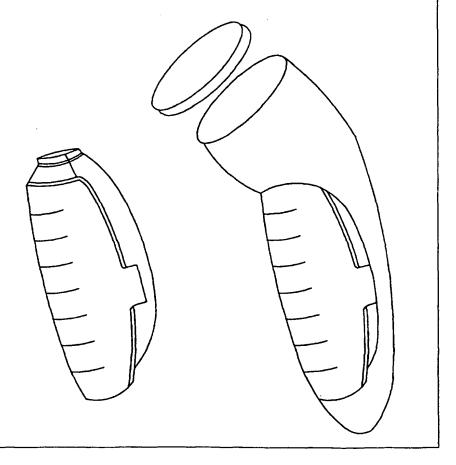
Published

Without international search report and to be republished upon receipt of that report.

(54) Title: ULTRASONIC CLEANING DEVICE

(57) Abstract

The present invention relates to an ultrasonic cleaning device.



DABLIAN DEIFOR